

REPORT BY THE  
AUDITOR GENERAL  
OF CALIFORNIA

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**CALIFORNIA HAS MORE PHYSICIANS  
THAN IT NEEDS**

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REPORT BY THE  
OFFICE OF THE AUDITOR GENERAL  
TO THE  
JOINT LEGISLATIVE AUDIT COMMITTEE

P-242

CALIFORNIA HAS MORE PHYSICIANS  
THAN IT NEEDS

NOVEMBER 1983



Telephone:  
(916) 445-0255

Thomas W. Hayes  
Auditor General

STATE OF CALIFORNIA  
**Office of the Auditor General**  
660 J STREET, SUITE 300  
SACRAMENTO, CALIFORNIA 95814

November 16, 1983


P-242

Honorable Art Agnos, Chairman  
Members, Joint Legislative  
Audit Committee  
State Capitol, Room 3151  
Sacramento, California 95814

Dear Mr. Chairman and Members:

The Office of the Auditor General presents its report concerning the supply of physicians in California and the State subsidy for medical education.

Respectfully submitted,

*for*   
THOMAS W. HAYES  
Auditor General

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## SUMMARY

Studies by the Office of Statewide Health Planning and Development (OSHPD) and federal health manpower agencies show that the State has a surplus of physicians. Moreover, the number of physicians per 100,000 persons in California continues to increase. The OSHPD reports that a surplus of physicians may contribute to the rising costs of health care and may result in an increase of unnecessary medical risks for patients. Furthermore, the surplus of physicians may not help reduce the number of rural and urban areas in the State that are medically underserved.

The primary cause of the physician surplus is an influx of physicians from other states. Of the physicians practicing in California in 1980, 75 percent attended medical schools in other states. Half of this number had also completed their residencies before moving to California. The other half completed their residencies in California residency programs. According to the OSHPD, either of these two groups--those who complete their entire medical education before they move into the State or those who move to California to complete their residencies--is more than sufficient to replace the number of California physicians who cease their practice each year.

The State's General Fund contributed approximately \$212.9 million in fiscal year 1982-83 for medical instruction and support of residency programs at the University of California (UC) medical schools. Based on our review of the data compiled and prepared by the OSHPD and the California Postsecondary Education Commission (CPEC), the State's subsidy for medical education is higher than needed to supply an adequate number of physicians in California.

Both the OSHPD and the CPEC oppose reducing enrollment in or closing any California medical schools as a means of controlling the number of physicians. However, the OSHPD has advocated reducing the

number of residency positions as one means of control. UC staff believe that reducing the number of UC residency positions may not reduce the number of physicians moving to California to receive resident training because the hospitals currently affiliated with the UC may continue to provide residencies even if these residency positions are not affiliated with the UC. Reducing the number of UC residency positions would, however, reduce General Fund expenditures for training and compensating residents.

In fiscal year 1982-83, the Legislature reduced the UC budget for medical resident students by \$2.0 million. Because California has more physicians than it needs, the Legislature may also wish to consider increasing fees or establishing tuition at the UC medical schools. To assist the Legislature in establishing state policies regarding the number of physicians and the State's subsidies for medical education, the OSHPD and the CPEC should explore options for reducing the surplus of physicians and include recommendations for legislative action in their biennial reports.

## INTRODUCTION

Medical education for physicians consists of instruction at both the undergraduate and the graduate levels. Most medical schools require that a person have at least three years of college work before entering the medical degree program. The medical school program leads to a medical degree and prepares a student for graduate medical education as a resident. A medical student usually spends three or more years as a resident before being certified in a medical speciality.

California has eight major medical schools providing undergraduate and graduate medical education. The University of California (UC) operates five of these schools; the other three schools are private. The UC also operates five teaching hospitals in connection with its medical schools. UC medical school undergraduates and residents receive clinical training either at the teaching hospitals or at non-UC hospitals that are affiliated with the UC.

In academic year 1981-82, the five UC medical schools had an enrollment of 2,587 undergraduate medical students. In addition, 4,376 UC residents received clinical training at the hospitals associated with these five UC medical schools. In the same year, the three private medical schools in California enrolled 1,552 undergraduates and 1,770 residents. In 1981, the UC conferred medical degrees on 567 students; 404 students received their medical degrees at the three independent

medical schools that year. (Appendix A shows the number of medical school undergraduates and residents enrolled in California medical schools.)

The 1983-84 Governor's Budget indicates that the State's General Fund provided \$212.9 million for medical education at the UC in 1982-83. This amount included \$142 million for instruction in medicine, \$46.4 million for clinical teaching support at the UC hospitals, and \$24.5 million for special support for interns and residents.

The Office of Statewide Health Planning and Development (OSHPD) and the California Postsecondary Education Commission (CPEC) are the two state agencies responsible for determining the State's needs for health personnel and the educational programs necessary to meet these needs. Chapter 600, Statutes of 1976 (Assembly Bill 1748), requires the OSHPD to prepare a biennial Health Manpower Plan that establishes standards for determining the adequacy of the number of physicians.\* This plan is also to recommend changes in health manpower policies, licensing statutes, and programs designed to meet the State's need for health personnel. Chapter 600, Statutes of 1976, also requires the CPEC to prepare a biennial Health Sciences Education Plan that considers the OSHPD's Health Manpower Plans and includes recommendations on the need to establish new programs or to eliminate existing programs in the health sciences.\*\*

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\*See Article 19 (commencing with Section 429.94) of Chapter 2 of Part 1 of Division 1 of the Health and Safety Code.

\*\*See Sections 66903.2 and 66903.4 of the Education Code.



## SCOPE AND METHODOLOGY

We reviewed information on the number of physicians in California and the need for the State to subsidize UC medical schools. Since the OSHPD and the CPEC are required to study both the number of physicians and the need for medical education programs in California, we limited our review to an analysis of the data that these two agencies compiled.

We examined the three California Health Manpower Plans issued by the OSHPD since 1977 and the three health sciences education plans issued by the CPEC since 1979. We also interviewed staff and examined other data compiled by each agency. In addition, we reviewed federal health manpower studies as well as reports published by the California Medical Association. Finally, we met with the president of the Union of American Physicians and Dentists and with representatives of the University of California and the State's private medical schools. We considered their comments in preparing this report.

In the following sections, we discuss the number of physicians in California, implications of the physician surplus, and ways to reduce both the surplus of physicians and the State's subsidy of medical education. We also include recommendations to assist the Legislature in establishing state policies regarding the number of physicians.

## ANALYSIS

### I

#### CALIFORNIA HAS A SURPLUS OF PHYSICIANS

Studies by the Office of Statewide Health Planning and Development (OSHPD) and federal health manpower agencies indicate that California has a surplus of physicians in most medical specialties. In 1980, California had a ratio of 232 physicians per 100,000 persons, exceeding the ratios recommended by the OSHPD and the federal health manpower agencies. Moreover, the OSHPD predicts that the number of physicians in California will increase while the need for physicians will decrease. Only in the general/family practice specialty and in certain rural and urban areas does the number of physicians in California fall below state and federal standards.

Since the early 1960s, efforts by the federal and state governments to increase the number of physicians have led to a significant rise in the number of students in medical schools, the number of physicians in graduate medical education, and, therefore, the number of practicing physicians in both the United States and California. In fact, this increase has reached a level that, according to the California Medical Association, indicates a surplus of physicians in the United States. Table 1 below shows the increase in the number of physicians per 100,000 persons in the United States and in California from 1960 to 1980.

TABLE 1  
PHYSICIANS PER 100,000 PERSONS

	<u>1960</u>	<u>1970</u>	<u>1980</u>
United States	149	161	183
California	158	176	232

As the table indicates, California's ratio of physicians per 100,000 persons has been higher than the national ratio since 1960. Furthermore, California's ratio has increased faster than the national ratio. Between 1960 and 1980, the ratio of physicians per 100,000 persons in California grew by 47 percent. Nationally, this ratio increased by 23 percent.

The May/June 1983 Socioeconomic Report prepared by the California Medical Association noted that the number of physicians per 100,000 persons in California exceeds not only the national average but most health manpower planners' estimates of the number of physicians required. American Medical Association data indicate that although California had 10.4 percent of the U.S. population in 1980, the State had 12.95 percent of the nation's physicians. The OSHPD reported that the number of physicians in California in 1980 exceeded the number of physicians needed to meet OSHPD standards. California had 232 physicians per 100,000 persons in 1980; the OSHPD recommended a range from 164 to 219 physicians per 100,000 persons. According to OSHPD analysts, California had a surplus of approximately 10,000 physicians at the close of 1980.

Federal health manpower studies also indicate that California has a surplus of physicians. For example, California's supply of physicians exceeds the Graduate Medical Education National Advisory Committee's recommended ratio of 191.4 physicians per 100,000 persons. Moreover, the U.S. Bureau of Health Manpower's survey of ten studies on the need for physicians showed that the recommended number of physicians ranged from 101.1 to 187.3 physicians per 100,000 persons. California's 1980 ratio of 232 physicians per 100,000 persons significantly exceeds this standard.

OSHPD data further indicate that California has more physicians than needed in most medical specialties. According to the OSHPD, the only medical specialty clearly needing additional physicians is general/family practice. (Appendix B shows the number of physicians in California by medical specialty and the OSHPD's recommended standard for each specialty.)

Not only do state and federal studies indicate that California's current supply of physicians exceeds the recommended standards, available data also suggest that the supply of physicians in California will continue to increase faster than its population. For example, OSHPD analysts project that by 1990, the ratio of physicians per 100,000 persons will reach at least 242. Table 2 below shows the OSHPD's projection of the supply of physicians in California through 1990.

TABLE 2

OSHPD PROJECTION OF PHYSICIANS  
PER 100,000 PERSONS IN CALIFORNIA  
1980-1990

	<u>1980</u>	<u>1982</u>	<u>1984</u>	<u>1986</u>	<u>1988</u>	<u>1990</u>
Physicians	54,082	56,602	59,122	61,642	64,162	66,682
Population	23,295,000	24,301,000	25,158,000	25,984,000	26,782,000	27,579,000
Ratio of Physicians to 100,000 persons	232	233	235	237	240	242
OSHPD Standards*	191	191	191	191	191	191

\*Average of OSHPD recommended range for physicians per 100,000 persons.

Source: "Preliminary Draft Report on Active Non-federal Physicians in California 1980-1990," Office of Statewide Health Planning and Development.

In addition, preliminary information collected by OSHPD analysts indicates that the need for physicians will decrease over the next eight years because of the expanded use of health maintenance organizations. Health maintenance organizations, such as Kaiser-Permanente Medical Group, provide comprehensive health care services for a fixed monthly fee. A recent OSHPD analysis shows that the increased use of health maintenance organizations reduces the number of physicians needed. In 1982, health maintenance organizations in California maintained a ratio of 106 physicians per 100,000 enrollees, significantly less than the ratio of 258 physicians per 100,000 persons for the remaining population.

Although OSHPD and federal health manpower studies indicate that California has an overall surplus of physicians, OSHPD reports state that there are not enough physicians serving certain geographical areas and population groups. Consequently, these areas and groups are

medically underserved. The OSHPD has designated several urban and rural areas as having an insufficient number of primary care physicians. Primary care includes family/general practice, general internal medicine, general pediatrics, and obstetrics/gynecology. These urban and rural areas contain approximately 5.5 million persons, about 4 million of whom are minorities.

## II

### IMPLICATIONS OF THE PHYSICIAN SURPLUS

The growing number of physicians in California will not necessarily reduce the cost of health care, improve the quality of care, or help establish equal access to medical services for all Californians. On the contrary, reports by the Office of Statewide Health Planning and Development assert that an excess number of physicians may contribute to the rising costs of health care and may result in an increase of unnecessary risks for patients. In addition, OSHPD reports indicate that further increases in the number of physicians alone will not ensure an increase in the number of physicians serving the medically underserved areas of California.

According to the OSHPD, having more physicians than necessary may contribute to the rising costs of health care. When a surplus of physicians exists, physicians do not necessarily compete directly with each other in a manner that would reduce the costs of medical care. According to Philip Lee, M.D., Director of the Institute for Health Policy Studies at the UC San Francisco School of Medicine, "because physicians decide when their patients will use various health services, an oversupply of physicians tends to generate an overutilization of other health services, including inpatient hospital care."

OSHPD analysts have attempted to determine the impact of the physician surplus on the costs of health care. They estimate that a physician generates an average of at least \$300,000 a year in health system costs. The OSHPD calculates that there were approximately 10,000 surplus physicians in California as of December 31, 1980. Based upon this calculation, the OSHPD estimates the excess cost to the health care system at approximately \$3 billion per year (10,000 x \$300,000).

The OSHPD further claims that an excess of physicians may result in some unnecessary medical services, which, in turn, represent unnecessary risks for the patients. This position is supported by other health care authorities. For example, at the annual meeting of the American Association of Medical Colleges in 1978, Joseph Califano, Secretary of the U.S. Department of Health, Education, and Welfare, reported that studies suggest that as the number of surgeons rises, the number of operations also rises, with no clear evidence that the additional surgeries are necessary.

On the other hand, a Rand Corporation study suggests that the growing number of physicians will help establish equal access to medical services. The Rand Corporation study indicates that as the supply of physicians increases, more physicians will move to nonmetropolitan areas. However, OSHPD reports indicate that further increases in the supply of physicians alone will not ensure an increase in the number of physicians in medically underserved areas of California. Based upon information collected in the past decade, the OSHPD reports that "although a certain



percent of all newly practicing physicians locate their practices in underserved areas, the majority still choose the more populated counties for their practices." Data published by the California Medical Association indicate that between 1971 and the end of 1981, the number of physicians per 100,000 persons in major metropolitan areas rose by 26.6 percent, a rate of increase that is more than double that of rural areas. In 1981, there were 246.9 physicians per 100,000 persons in the major metropolitan areas of the State; in rural areas, the ratio was 93.0 physicians per 100,000 persons. Moreover, certain metropolitan areas continue to be underserved, despite the general surplus of physicians. For example, OSHPD's 1979 Health Manpower Plan indicates that the East Los Angeles area had a ratio of 24.1 physicians per 100,000 persons, a ratio that is far below the statewide ratio for major metropolitan areas.

### III

#### REDUCING THE SURPLUS OF PHYSICIANS AND THE STATE SUBSIDY FOR MEDICAL EDUCATION

According to the Office of Statewide Health Planning and Development, the primary cause of California's surplus of physicians is the movement of physicians into California from other states. The continuing influx of physicians from other states alone could fill California's need for physicians without the medical education programs presently existing in California. Thus, the State's subsidy for medical education is higher than needed to supply an adequate number of physicians for California residents. The State could take a number of actions to reduce the surplus of physicians and the State's subsidy for medical education. These actions include reducing enrollment in or closing some of California's medical schools, reducing the number of UC residency positions, and increasing fees or instituting tuition at the UC medical schools.

Reducing the surplus of physicians and the State's subsidy involves complex policy issues, and no single solution is evident in either the California Health Manpower Plans or the California Health Sciences Education Plans.

Both the Office of Statewide Health Planning and Development and the California Postsecondary Education Commission oppose reducing

enrollment in or closing any of California's medical schools. The OSHPD has proposed reducing the number of residency positions, but even this action might not reduce the number of physicians moving to California. The Legislature has already taken action to reduce the number of UC residents. In light of the surplus of physicians, the Legislature should also consider reducing medical school enrollment, or increasing fees or instituting tuition at public medical schools.

#### Influx of Physicians

The OSHPD reports that as of 1980, only 25 percent of the physicians currently practicing in California received their undergraduate medical education in California medical schools. Of the remaining 75 percent of California physicians, approximately half received their undergraduate medical education in other states and moved to California to receive graduate medical education as residents. The other half moved to California after receiving their entire medical education and their licenses in other states.

Based on this data, OSHPD analysts indicate that either the licensed physicians who move to California from other states annually or the physicians who move to California to complete graduate medical education programs each year would be more than sufficient to replace those California physicians who cease practicing. The CPEC expressed a similar view in its 1980-82 health sciences education plan:

Given the continued immigration of physicians and the total physician population, it theoretically might be possible to meet the "number of physicians needed" without any medical education programs in California.

#### Reducing Enrollment or Closing Medical Schools

One method for reducing the surplus of physicians and the State's subsidy for medical education is reducing undergraduate enrollment in or closing some of California's medical schools. However, neither OSHPD staff nor CPEC staff prefer this option. UC officials concur with the OSHPD and the CPEC on this matter. The OSHPD staff oppose reducing undergraduate enrollment in or closing medical schools because the current number of medical students is just sufficient to replace those California physicians who cease practicing, assuming no influx from other states. OSHPD staff told us that California's medical schools are needed to meet the State's special health manpower needs pertaining to medically underserved areas and special population groups.

The CPEC also opposes reducing undergraduate enrollment in or closing California's medical schools. According to the CPEC's 1980-82 health sciences education plan, decisions about medical education should not be based upon the number of physicians. This plan states that "as a planning agency concerned with educational opportunity, the CPEC cannot accept a rationale for providing medical education based solely on manpower needs." Furthermore, CPEC staff indicate that the opportunities for Californians to get into medical school are limited. The CPEC's

1978-80 health sciences education plan noted that while California had 10.1 percent of the nation's population, California had only about 6.4 percent of the first-year medical school positions in the country. The plan further noted that California ranked 27th among all states in the number of students entering medical school per 100,000 persons, and 46th in the number of students accepted into medical school per number of applicants.

However, other agencies have advocated reducing enrollment in or closing California medical schools. The President of the Union of American Physicians and Dentists said that closing two medical schools would be an effective solution to the surplus situation. Furthermore, the California Medical Association adopted a resolution at its 1983 House of Delegates meeting to commend those medical schools in California that have voluntarily decreased their enrollments.

#### Reducing the Number of Residencies

Although neither the OSHPD nor the CPEC recommend reductions in undergraduate medical education, both agree that the State may be funding more residents than necessary. In 1981, UC medical schools enrolled 2,587 undergraduate students; the number of UC residency positions that year was 4,376. In contrast, the State's three independent medical schools enrolled 1,552 undergraduates and had 1,770 residency positions. The UC's Special Assistant to the President for Health Affairs said that the higher ratio of residents to undergraduates at the UC is a result of

public pressure for hospitals to affiliate with UC. He stated that UC affiliated residency programs attract the higher quality students. Therefore, the hospitals want to become affiliated with the UC, and there is public policy pressure for the UC to accept these affiliated residency programs.

In a supplement to its 1977 California Health Manpower Plan, the OSHPD proposed reducing the number of residency positions for several categories of physician specialists as one means of controlling the increase in the number of physicians. Reducing the number of UC residents would also reduce General Fund appropriations for training and compensating residents. However, UC staff said that reducing the number of UC residency positions may not reduce the number of physicians moving to California because hospitals now affiliated with the UC may continue providing residencies even if these residencies were no longer affiliated with the UC. The UC has begun a major new planning effort to deal with its programs in health sciences. This project, to be completed next year, will include plans for residency programs. OSHPD analysts indicate that the 1983 Health Manpower Plan will also examine the desirable number and types of residency positions that should be offered by the UC.

Although the CPEC agrees that the State may be funding more residents than necessary, the CPEC does not recommend eliminating any of the UC residency positions. Section 66903.4 of the Education Code requires that the CPEC consider the findings included in the OSHPD's Health Manpower Plans and provide recommendations for establishing new

programs or eliminating existing programs in health sciences. However, the CPEC's 1983-84 health sciences education plan makes no such recommendations. Instead, the CPEC has preferred to rely upon the UC's own self-assessment.

Legislative Analyst staff state that the marginal cost to the State per medical resident per year is \$10,840. Thus, reducing the number of UC residency positions would reduce the State's General Fund appropriations for training and compensating residents. However, both the UC and the CPEC assert that hospital care would be more costly without residents to fill the need for low-cost hospital medical staff.

The Legislature has recently taken several steps to reduce the number of UC residents. First, the Legislature approved the UC's plan for reducing its fiscal year 1982-83 budget by 2.5 percent, as required by the Governor. This plan reduced by 70 the number of UC medical residents. Second, as part of the Medi-Cal reform package, the Legislature reduced the UC's budget by an additional \$2 million and indicated that the reduction should be taken from the support for nonprimary care residency programs. The UC has proposed reducing the number of residents by 267 positions to meet the required \$2 million savings.

### Increasing Fees or Imposing Tuitions

In addition to reducing medical school enrollment, closing medical schools, or reducing the number of resident positions, the Legislature may wish to review the desirability of increased fees or tuition at public medical schools. The Legislative Analyst and the CPEC have recommended that the Legislature request that the UC Board of Regents set fees for medical, dental, and veterinary medicine students above the fees charged for other UC graduate students. For fiscal year 1983-84, the average fee paid by UC graduate students is \$1,434.\* The Legislative Analyst's comparison of the costs for UC medical students with the costs for other UC graduate students indicates that medical students cost the State far more than other graduate students. The Legislative Analyst indicates in its 1983-84 Analysis of the Budget Bill that the marginal cost to the State per student per year in 1983-84 is \$33,611 for medical students and \$3,344 for UC graduate students (excluding dentistry and veterinary medicine). Since California has more physicians than it needs, this level of subsidy may not be warranted. The OSHPD agrees that the State's subsidy for medical education tuition may be excessive. At the same time, however, the OSHPD contends that any proposals for increasing fees and tuition must consider students' ability to pay and must consider the potential hardship imposed on the disadvantaged and minorities.

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\*In fiscal year 1983-84, out-of-state medical students pay \$3,360 in tuition in addition to these fees.



#### IV

##### CONCLUSION AND RECOMMENDATIONS

The number of physicians per 100,000 persons in California exceeds both the national average and the state and federal standards for physician requirements. The Office of Statewide Health Planning and Development reports that the oversupply of physicians may contribute to the rising cost of health care, may represent an unnecessary risk to patients, and may not increase the number of physicians in California's medically underserved areas. In addition, because California has more physicians than it needs, the State's subsidy for medical education may be excessive. The State's relative oversupply of physicians is due primarily to licensed physicians moving to California and physicians who moved to California to receive graduate medical education as residents.

Both the Office of Statewide Health Planning and Development and the California Postsecondary Education Commission oppose reducing undergraduate enrollments in or closing any California medical schools as a means of controlling the number of physicians in the State. However, both the OSHPD and the CPEC agree that the State may be funding more residents than necessary. The OSHPD has advocated reducing the number of residency positions. UC staff indicate, however, that reducing state funding of UC residents may not reduce the number of physicians moving to California because hospitals now affiliated with the UC may continue to offer residencies without this funding. Nevertheless, reducing the

number of UC residents would reduce General Fund expenditures for training and compensating residents. In fiscal year 1982-83, the Legislature did take action to reduce the number of UC residents.

In addition to reducing undergraduate medical school enrollment, closing medical schools, or reducing the number of residents, the Legislature may wish to consider increasing fees or instituting tuition for all students at the UC medical schools. Since California has more physicians than it needs, the State's subsidy for medical education may be excessive. However, these options involve complex policy issues that must be resolved by the Legislature based on California Health Manpower Plans, Health Sciences Education Plans, and recent budget reductions.

#### RECOMMENDATIONS

To assist the Legislature in establishing state policies regarding the supply of physicians, the Office of Statewide Health Planning and Development should include the following in its 1985 Health Manpower Plan:

- A comprehensive discussion of the supply of physicians related to the State's present and future needs;
- A comprehensive discussion of the effect of the surplus of physicians on the cost and the quality of health care;

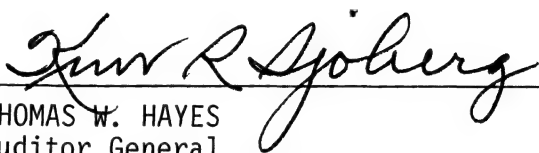
- A comprehensive exploration of various methods that might be used to control the number of physicians, including reductions in the number of residencies and increases in medical fees or tuition; and
- Specific recommendations to the Legislature for changing policies, statutes, and programs related to medical education in California.

Similarly, the California Postsecondary Education Commission should follow the mandate of Chapter 600, Statutes of 1976 (Assembly Bill 1748), and include in its Health Sciences Education Plans specific recommendations for adding or eliminating health sciences educational programs. The CPEC should take into account the findings presented in the OSHPD's Health Manpower Plans.

If the physician surplus continues to exist, the Legislature may wish to review the desirability of increasing fees or instituting tuition at the University of California medical schools. The Legislature should also provide loans, grants, and repayment systems based upon students' financial needs and ability to pay.

We conducted this review under the authority vested in the Auditor General by Section 10500 et seq. of the California Government Code and according to generally accepted governmental auditing standards. We limited our review to those areas specified in the audit scope section of this report.

Respectfully submitted,

  
for THOMAS W. HAYES  
Auditor General

DATE: October 31, 1983

STAFF: Robert E. Christophel, Audit Manager  
William S. Aldrich  
Gregg A. Gunderson

## OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT

1600 9TH STREET  
SACRAMENTO, CA 95814  
(916) 322-5834



October 27, 1983

Mr. Thomas W. Hayes  
Auditor General  
660 J Street, Suite 300  
Sacramento, CA 95814

Dear Mr. Hayes:


I have completed review of your draft report #P-242 on the issue of an excess physician supply and the implications for state-supported medical education programs. While you have made several important findings, we must further assess the question of the effects of physician supply on the quality, distribution and access to medical care.

I am pleased that the report favorably reflects the work performed by the Office of Statewide Health Planning and Development. The positions resulting from that work were developed prior to the establishment of recent health care financing and delivery initiatives. Those initiatives can be expected to have a significant impact on medical education programs in California, and on the policy of this Administration regarding those programs.

The Office is continuing to assess the supply and distribution of physicians in California, the State's needs for various types of physicians, and the implications of excess supplies for publicly-supported medical education activities.


I appreciate the opportunity to comment on your report.

Sincerely,



Larry G. Meeks  
Director

Approved:



David B. Swoap  
Secretary  
Health and Welfare Agency

October 26, 1983

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leading to unnecessary treatment, and yet failing to fill in gaps in the distribution system. As far as we know, all of these suppositions remain debatable. In regard to the maldistribution problem, for example, the field of dentistry may indicate a pattern. In dentistry, a field in which there is definite evidence of a surplus, new dentists have of necessity been establishing practice in previously underserved areas. The same pattern might manifest itself in medicine. Because of limited evidence, the effect of an oversupply of physicians on costs of medical care is equally uncertain. The report's recommendation calling for a comprehensive discussion of the effect of the surplus of physicians on the cost of quality of health care is therefore particularly timely and appropriate.

We concur with the recommendations calling for the Office of Statewide Planning and Development to make a thorough review of supply and demand of physicians. If such a study clearly demonstrates the need for changes in health science education in California, the California Postsecondary Education Commission will certainly take that into account in its planning.

Sincerely yours,



Kenneth B. O'Brien  
Associate Director

KBOB:sb

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Auditor General Comment: Our conclusion that California has more physicians than it needs is based not only on the OSHPD's standards but on federal studies as well. We fully discuss this on pages 6-7 of our report.

## CALIFORNIA POSTSECONDARY EDUCATION COMMISSION

1020 TWELFTH STREET  
SACRAMENTO, CALIFORNIA 95814  
(916) 445-7933



October 26, 1983

Thomas Hayes  
Auditor General  
Office of the Auditor  
General  
660 J Street, Suite 300  
Sacramento, California 95814

Dear Mr. Hayes:

We would like to present the following comments on The Auditor General's Report P-242, California Has More Physicians Than It Needs.

The report presents the summary of the issues and questions relating to physician supply and demand in California. Based largely on reports and recommendations of the Office of Statewide Health Planning and Development (OSHPD) and the California Postsecondary Education Commission CPEC), it also incorporates statements and views of professional societies, federal agencies, and the University of California. It concludes with recommendations that are appropriate and reasonable.

If we have any reservations concerning the report, they involve questions of emphasis and balance. For example, the report accepts an existing surplus of physicians in California as an established fact. Even though there may be concrete evidence that fewer physicians could minister to the health needs of the current California population, none is presented. The surplus theory is based on an arbitrary ratio of physicians per 100,000 population, and while this formula may constitute the best estimate it is possible to make, it remains a rough and essentially subjective measure of supply and demand. The report gives the impression of accepting somewhat uncritically OSHPD's estimate, based on such a formula, of an existing oversupply of 10,000 physicians. In view of the numbers of MD degrees being awarded annually and assuming a continuing in-migration of physicians trained in other states, it is hard to imagine that California will not be facing a surplus in the near future, but for now, we feel that the title of this report states a conclusion that is not irrefutably documented in the text.\*

The consequences of a physician surplus are also more speculative at this point than the report indicates. The OSHPD assumes that all the effects will be negative, adding to overall costs of health care,

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\*The Auditor General's comment on this point appears at the bottom of the next page.

APPENDIX A

NUMBER OF UNDERGRADUATES  
AND RESIDENTS ENROLLED IN CALIFORNIA  
MEDICAL SCHOOLS, ACADEMIC YEAR 1981-82\*

<u>University of California Medical Schools</u>	<u>Undergraduates</u>	<u>Residents</u>
UC Davis	407	596
UC Irvine	380	606
UC Los Angeles	675	1,586
UC San Diego	509	430
UC San Francisco	<u>616</u>	<u>1,158</u>
Subtotal	<u>2,587</u>	<u>4,376</u>
<u>Independent Medical Schools</u>		
Loma Linda	568	450
Stanford	397	423
University of Southern California	<u>587</u>	<u>897</u>
Subtotal	<u>1,552</u>	<u>1,770</u>
Total	<u>4,139</u>	<u>6,146</u>

\*Excludes specialized medical schools such as the College of Osteopathic Medicine of the Pacific and the California College of Podiatric Medicine.



NUMBER OF PHYSICIANS IN CALIFORNIA  
BY SPECIALTY COMPARED TO OSHPD  
RECOMMENDED STANDARDS, 1980<sup>a</sup>

<u>Specialty</u>	<u>Number of Physicians, Per 100,000 Persons<sup>b</sup></u>	<u>OSHPD Recommended Standard (Range)<sup>c</sup></u>
Primary Care Specialties:		
General/Family Practice	32.65	40.00 - 60.00
Internal Medicine	38.58	25.00 - 31.90
OB/GYN	14.14	9.00 - 11.00
Pediatrics	<u>15.91</u>	<u>9.00</u> - <u>13.60</u>
Subtotal	<u>101.28</u>	<u>83.00</u> - <u>116.50</u>
Surgical Specialties:		
General Surgery	16.11	9.00 - 11.00
Neurological Surgery	1.98	0.90 - 1.30
Ophthalmology	7.07	4.00 - 5.00
Orthopedic Surgery	8.72	3.00 - 4.30
Otolaryngology	3.81	2.50 - 3.40
Plastic Surgery	2.16	1.60 - 1.90
Surgery-Colon and Rectal	0.39	0.39 - 0.39
Surgery-Thoracic	1.12	0.70 - 1.00
Surgery-Urology	<u>3.98</u>	<u>3.00</u> - <u>3.60</u>
Subtotal	<u>45.34</u>	<u>25.09</u> - <u>31.89</u>
Other Medical Specialties:		
Aerospace Medicine	0.22	0.22 - 0.22
Allergy	0.90	0.80 - 1.10
Anesthesiology	10.22	6.60 - 8.10
Cardiovascular Diseases	5.58	2.00 - 4.00
Child Psychiatry	2.09	2.09 - 2.09
Dermatology	3.87	2.30 - 3.00
Diagnostic Radiology	4.14	4.14 - 4.14
Forensic Pathology	0.18	0.17 - 0.17
Gastroenterology	2.09	1.70 - 2.50
General Preventive Medicine	0.53	0.53 - 0.53
Neurology	3.09	1.30 - 1.50
Occupational Medicine	1.24	1.24 - 1.24
Pathology	6.39	3.20 - 5.00
Pediatric Allergy	0.25	0.25 - 0.25
Pediatric Cardiology	0.41	0.41 - 0.41
Physical Medicine and Rehabilitation	1.05	1.05 - 1.05
Psychiatry	17.28	6.60 - 12.50
Public Health	1.40	1.40 - 1.40
Pulmonary Diseases	2.14	1.10 - 1.50
Radiology	6.51	3.30 - 4.30
Radiology-Therapeutic	<u>1.04</u>	<u>0.50</u> - <u>0.70</u>
Subtotal	<u>70.62</u>	<u>40.90</u> - <u>55.70</u>
Other Specialties	<u>7.81</u>	<u>7.81</u> - <u>7.81</u>
Unspecified	<u>7.11</u>	<u>7.11</u> - <u>7.11</u>
Total	<u>232.16</u>	<u>163.91</u> - <u>219.01</u>

<sup>a</sup> Excludes physicians working for the federal government.

<sup>b</sup> "Physician Distribution and Medical Licensure in the U.S. 1980," American Medical Association, Chicago, IL, 1981.

<sup>c</sup> California Health Manpower Plan 1977, Office of Statewide Health Planning and Development. Where the number of physicians and the recommended standard are the same, the OSHPD had insufficient data to develop standards.

cc: Members of the Legislature  
Office of the Governor  
Office of the Lieutenant Governor  
State Controller  
Legislative Analyst  
Director of Finance  
Assembly Office of Research  
Senate Office of Research  
Assembly Majority/Minority Consultants  
Senate Majority/Minority Consultants  
Capitol Press Corps